IN THE SPECIFICATION

Please replace the paragraph beginning on page 4, line 6 with the following replacement paragraph:

Note that the feedback from differential amplifier 205 is both negative and positive in that differential amplifier 205 receives the voltage from node A at its positive input and the voltage from node B at its negative input. If the voltage at node A is too high with respect to a desired operating voltage, differential amplifier 205 increases its output voltage so that the current through transistors M1 through M3 is reduced, thereby reducing the voltage across resistor R_2 to bring the voltage at node A down. Similarly, if the voltage at node B is too low, differential amplifier decreases its output voltage so that the current in transistors M1 through M3 is increased, thereby increasing the voltage across resistor R_3 to bring the voltage at node B up. In this fashion, equilibrium is reached such that the voltages of nodes A and B are kept substantially equal.

Please replace the paragraph beginning on page 5, line 11 with the following replacement paragraph:

These two voltages V_{BE1} and V_{BE2} may be used to derive the value of I_1 (and hence I_2 and I_3) as follows. Current I_1 must equal the sum of the current through resistance R_2, which equals V_{BE1}/R_2, and the current through diode D_1. Because the diode currents are the same, the current through diode D_1 equals the current through variable resistance R_1. In turn, the current through variable resistance R_1 equals $(V_{BE1} - V_{BE2})/R_1$. Thus, the currents I_1, I_2, and I_3 may be expressed as:

$$I_1 = I_2 = I_3 = (1/R_2) * [V_{BE1} + \Delta V_{BE} * R_2/R_1] \quad \text{Eq. (1)}$$

where $\Delta V_{BE2} = V_{BE1} - V_{BE2}$. As discussed above, a voltage such as V_{BE1} will have a CTAT dependency whereas a voltage such as ΔV_{BE} will have a PTAT dependency. In particular, the voltage ΔV_{BE} equals $V_T \ln(n)$, which in turn equals $(kT/q) * \ln(n)$, where V_T is the thermal voltage, k is Boltzmann's constant, n is the cross sectional ratio (area of D_2)/(area of D_1), and q is the electronic charge. Thus, the bracketed component in equation (1) depends upon the summation of a PTAT voltage and a CTAT voltage. By proper compensation of these PTAT and CTAT components, currents I_1 through I_3 may be made stable with respect to changes in temperature. The output voltage ~~V_{out}, which~~ V_{out}, which depends upon the product of a variable resistance R_4 and current I_3, becomes:

$$V_{out} = (R_4/R_2) * [V_{BE1} + \Delta V_{BE} * R_2/R_1] \quad \text{Eq. (2)}$$

Thus, by varying the resistance R_1, the balance between the PTAT and CTAT voltage contributions may be changed to ensure that V_{out} is stable with respect to changes in temperature. Similarly, by varying the resistance R_4, the output voltage level for V_{out} may be changed. The variation of R_1 will be discussed first.